

Looking Towards A Retrospective Future

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I wish this was about Ubuntu MATE. It isn't, alas. With the general freak-out again over net neutrality in the United States let alone the Internet blackout in Pakistan, it is time to run some ideas.¹

The Internet hasn't been healthy for a while. Even with net neutrality rules in the United States, I have my Internet Service Provider neutrally blocking all IPv6 traffic and throttling me. As you can imagine, that now makes an apt update quite a pain. When I have asked my provider, they have said they have no plans to offer this on residential service. When I have raised the point that my employer wants me to verify the ability to potentially work from home in crisis situations, they said I would need to subscribe to "business class" service and said they would happily terminate my residential service for me if I tried to use a Virtual Private Network.

At this point, my view of the proposed repeal of net neutrality rules in the United States is simple. To steal a line from a former presidential candidate: *What difference at this point does it make?*² I have exactly one broadband provider available to me.³ Unless I move to HughesNet or

¹Megan McArdle, "The Internet Had Already Lost Its Neutrality," *Bloomberg.Com*, November 21, 2017, <https://www.bloomberg.com/view/articles/2017-11-21/the-internet-had-already-lost-its-neutrality>. ; M. Ilyas Khan, "The Politics behind Pakistan's Protests," *BBC News*, November 26, 2017, sec. Asia, <http://www.bbc.com/news/world-asia-42129605>.

²The candidate in this case is Hillary Clinton. That sentence, often taken out of context, was uttered before the Senate Foreign Relations Committee in 2013.

³Sadly the National Broadband Map project was not funded to be continually updated. It would have continued to show that, even though cell phone services are available, those are not meant for use in place of a wired broadband connection. Updates stopped in 2014.

maybe something exotic, I have what is generally available.⁴

The Internet, if we can even call it a coherent whole anymore, has been quite stressed over the past few years. After all, a simple hurricane can wipe out Internet companies with their servers and networks based in New York City.⁵ In Puerto Rico, mail carriers of the United States Postal Service were the communications lifeline for quite a while until services could come back online.⁶ It can be popular on the African continent to simply make Internet service disappear at times to meet the needs of the government of the day.⁷ Sometimes bad things simply happen, too.⁸

Now, this is not say people are trying to drive forward. I have found concept papers with ideas that are not totally "pie in the sky".⁹ Librarians see the world as one where it is littered with PirateBoxes that are instead called LibraryBoxes.¹⁰ Alphabet's own Project Loon has been field tested in the skies of Puerto Rico thanks to the grant of a "Special Temporary Authority" by the Federal Communications Commission's Office of Engineering Technology.¹¹

⁴I am not made of gold but this is an example of an offering on the Iridium constellation: <http://www.bluecosmo.com/iridium-go/rate-plans>.

⁵Sinead Carew, "Hurricane Sandy Disrupts Northeast U.S. Telecom Networks," *Reuters*, October 30, 2012, <https://www.reuters.com/article/us-storm-sandy-telecommunications/hurricane-sandy-disrupts-northeast-u-s-telecom-networks-idUSBRE89T0YU20121030>.

⁶Hugh Bronstein, "U.S. Mail Carriers Emerge as Heroes in Puerto Rico Recovery," *Reuters*, October 9, 2017, <https://www.reuters.com/article/us-usa-puertorico-mail/u-s-mail-carriers-emerge-as-heroes-in-puerto-rico-recovery-idUSKBN1CE15G>.

⁷"Why Has Cameroon Blocked the Internet?," *BBC News*, February 8, 2017, sec. Africa, <http://www.bbc.com/news/world-africa-38895541>.

⁸"Marshall Islands' 10-Day Internet Blackout Extended," *BBC News*, January 9, 2017, sec. News from Elsewhere, <http://www.bbc.com/news/blogs-news-from-elsewhere-38559117>.

⁹Pekka Abrahamsson et al., "Bringing the Cloud to Rural and Remote Areas - Cloudlet by Cloudlet," *ArXiv:1605.03622 [Cs]*, May 11, 2016, <http://arxiv.org/abs/1605.03622>.

¹⁰Jason Griffey, "LibraryBox: Portable Private Digital Distribution," *Make: DIY Projects and Ideas for Makers*, January 6, 2014, <https://makezine.com/projects/make-37/librarybox/>.

¹¹Nick Statt, "Alphabet's Project Loon Deploys LTE Balloons in Puerto Rico,"

Now, I can imagine life without an Internet. My first e-mail address was tremendously long as it had a gateway or two in it to get the message to the BBS I dialed into that was tied into FidoNet. I was hunting around for FidoNews and, after reading a recent issue, noticed some names that correlate in an interesting fashion with the Debian & Ubuntu realms. That was a very heartening thing for me to find. With the seeding of apt-offline on at least the Xubuntu installation disc, I know that I would be able to update a Xubuntu installation whenever I actually found access *somewhere* even if it was not readily available to me at home. Thankfully with that bit of seeding we solved the "chicken and the egg" problem of how do you install something like that which you need when you don't have the access to get it to use.

We can and likely will adapt. We can and likely will overcome. These bits of madness come and go. As it was, I already started pricing the build-out of a communications hub with a Beverage antenna as well as an AN-FLR9 Wullenweber array at a minimum. On a local property like a couple acres of farm land I could probably set this up for just under a quarter million dollars with sufficient backups.¹² One farm was positioned close enough to a physical corridor to the PIT Internet Exchange Point but that would still be a little over 100 miles to traverse. As long as I could get the permissions, could get the cable laid, and find a peer, peering with somebody who uses YYZ as their Internet Exchange Point is oddly *closer* due to quirks of geography.

Earlier in today's news, it appeared that the Democratic People's Republic of Korea made yet another unauthorized missile launch.¹³ This one appears to have been an ICBM that landed offshore from Japan.¹⁴ The DPRK's leader has threatened missile strikes of various sorts over the past

The Verge, October 20, 2017, <https://www.theverge.com/2017/10/20/16512178/alphabet-project-loon-puerto-rico-lte-balloons-disaster-relief-connectivity>.

¹²One property reviewed with a house, two barns, and a total of six acres of land came to \$130,000. The rest of the money would be for licensing, equipment, and construction.

¹³"North Korea Fires New Ballistic Missile." *BBC News*, November 28, 2017, sec. Asia. <http://www.bbc.com/news/world-asia-42160227>.

¹⁴"N Korea 'Tested New Long-Range Missile.'" *BBC News*, November 29, 2017, sec. Asia. <http://www.bbc.com/news/world-asia-42162462>.

year on the United States.¹⁵ A suborbital electromagnetic pulse blast near our Pacific coast, for example, would likely wipe out the main offices of companies ranging from Google to Yahoo to Apple to Amazon to Microsoft in terms of their computers and other electronic hardware.¹⁶

I'm not really worried right now about the neutrality of internetworking. I want there to still be *something* carried on it. With the increasingly real threat of an EMP possibly wiping out the USA's tech sector due to one rogue missile, bigger problems exist than mere paid prioritization.¹⁷

¹⁵Kim, Christine, and Phil Stewart. "North Korea Says Tests New ICBM, Can Reach All U.S. Mainland." *Reuters*, November 29, 2017. <https://www.reuters.com/article/us-northkorea-missiles/north-korea-fires-ballistic-missile-u-s-government-sources-idUSKBN1DS2MB>.

¹⁶*For example:* Zimmerman, Malia. "Electromagnetic Pulse Attack on Hawaii Would Devastate the State." *Fox News*, May 12, 2017. <http://www.foxnews.com/us/2017/05/12/electromagnetic-pulse-attack-on-hawaii-would-devaste-state.html>.

¹⁷Apparently the last missile test can reach the Pacific coast of the United States. See: Smith, Josh. "How North Korea's Latest ICBM Test Stacks up." *Reuters*, November 29, 2017. <https://www.reuters.com/article/us-northkorea-missiles-technology-factbo/how-north-koreas-latest-icbm-test-stacks-up-idUSKBN1DT0IF>.